



K4GSO.us

The Oracle

Newsletter of the Silver Springs Radio Club

Oldest Radio Club in Marion County, FL



January 2021

President's Message

Bill Gillespie, KW5BG

Well, we are embarking on a new year. We can all hope this one is a bit less 'troublesome.' Many of our activities were either canceled or severely altered. I'm hopeful we can meet in person before too long. It has been helpful to have Zoom meetings so we can see one another, but it's just not the same as talking face-to-face. I'd like to once again thank Tullio Dellaquila (K2PCG) for the use of his Zoom account.

Being the beginning of the year, it's membership renewal time. By the time you read this, the process of renewal will be more user friendly. Carl has been working very hard and I think you'll find the online process will be much nicer. As far as payment goes, you can use PayPal or send a check to our Post Office box (Silver Springs Radio Club, PO Box 787, Silver Springs, FL 34489-0787). If you have any questions you can contact me, Elbert (KQ3K), or Carl (KC5CMX) if it's a technical question.

We will continue getting together the last Saturday of each month to help new people to learn about different aspects of our hobby or some of us older operators learn about a newer mode. The emphasis will be on getting on the air. If you have a subject you'd like covered, or one you'd like to lead, please step forward and let us know.

If you have an interest in contesting, we have an active group within the club who can help get you started. If you refer to December's Oracle, you will find a schedule for the major Amateur Radio contests for the year. If there is one that interests you, let us know.

Although not contests per se, Winter Field Day and Summer Field Day are good opportunities to operate in different bands and modes. We're hopeful of participating in these in the field, but if not we'll use the rules to participate as a club from our homes.

Participation is the key to a successful club and we are working to keep everyone as involved and active as we can within the Covid-19 restrictions and within your

comfort level. If you have ideas how we can do that, or ideas of things you think we can do, please let us know.

Welcome to the new year and let's have fun.

Next Club Meeting

Tuesday, January 19 Via Zoom

Meeting Room Open: 6:30 PM

Meeting at 7:00 PM

SSRC Board of Directors first Tuesday, 7:00 PM

VE Testing

March 9 — Green Clover Hall, 7:00 PM

Silver Springs Radio Club Net

K4GSO Repeater

Mondays at 7:30 PM

146.610, PL 123

Winter Field Day Options

Wayne Brown, N4FP

Winter Field Day is organized by the Winter Field Day Association. Their purpose is to promote emergency preparedness during winter operating conditions. Both N3FJP and N1MM+ Logging software support this event.

WFD Rules

At the January board meeting I agreed to review the rules and offer some possible approaches for club operation that we could discuss at the Zoom meeting on the 19th.

When:

Saturday, January 30, 1900 UTC (2 PM EST) to Sunday, January 31, 1900 UTC (2 PM EST)

Option 1: Those who wish to participate in WFD can operate individually in any of the categories discussed in the rules (Indoor Outdoor and Home,) using his/her own call. At the end of the contest each participant will create a Cabrillo file specifying Silver Springs Radio Club in the club entry field and submit the file to the WFD Association (see rules). In this scenario, the totals will be aggregated into a club total regardless of category worked. Each individual would also be entered in the event under his/her own call and category.

Option 2: INDOOR. Since Green Clover Hall is not available that weekend, participants could set up at Perry Field using equipment and antennas that are NOT part of the Perry Field installation. Those participating would operate as K4GSO, using Indoor as the category along with the number of stations that can operate simultaneously. The Cabrillo would be submitted as a club event.

Option 3: OUTDOOR. Same as Option 2 only using an Outdoor exposed location such as a park, picnic shelter etc.

If you're interested in participating, review the WFD Rules link above, and give us your thoughts on Tuesday.

N3FJP Upgrades & Winter Field Day Rules

Elbert Wilkinson, KQ3K, Immediate Past President

N3FJP is introducing some major upgrades to their logging programs. There is also an update on the Winter Field Day rules.

N3FJP Upgrades

2021 SSRC Officers

President— Bill Gillespie, KW5BG
Vice President— Jim Burgess, KN4MIV
Secretary — Ivory Williams, W6IVY
Treasurer— Tom Lufkin, W4DAX
Immediate Past President—Elbert Wilkinson, KQ3K

Directors:

Mike Condon— W9MMC
Gilbert Gyarmati— K4GLG
Wayne Brown— N4FP

Committee Chairs:

Membership – Elbert Wilkinson, KQ3K
Trustee K4GSO – Wayne Brown, N4FP
Newsletter – Marty Brown, N4GL

Club Minutes and Financial Reports

News You Can Use

SSRC Logo Shirts & Caps
Green Clover Key Card
Perry Field Access
Membership Application
Buy/Sell/Trade
QST NFL – NFL Section Newsletter
Silver Springs Radio Club Website
NFL Section Website
WA7BNM Contest Calendar
NG3K DX

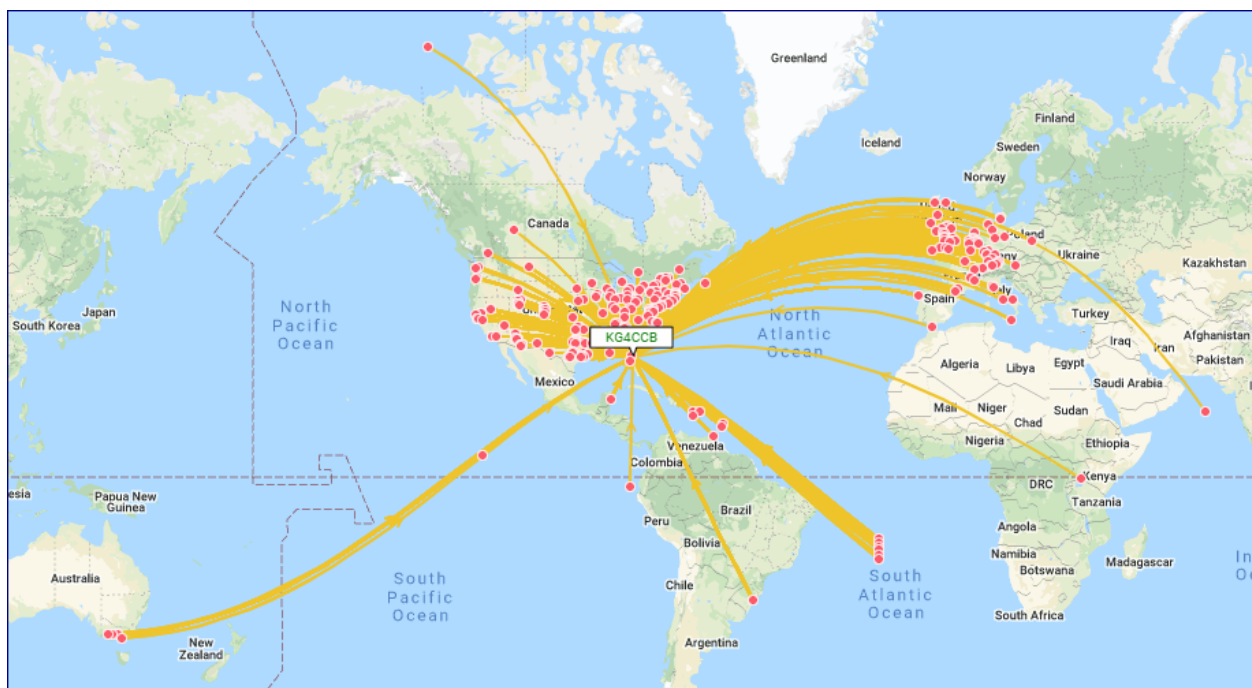


ANTENNA TESTING WITH WSPR

Darrell Franchuk / KG4CCB

Between March and December 2020, I conducted 230 antenna test cycles with Weak Signal Propagation Reporter (WSPR) of which 153 were receiving cycles and the balance were transmit cycles. These tests involved an IC-7300, and FT-818ND, and an SDR Play 1A together with 2 fixed vertical antennas, 2 fixed dipole antennas, a portable Delta Loop, and four mobile antennas. The test cycles ranged in duration from 1 hour to 48 hours, but most were generally 24 hours on receive and 18 hours or less on transmit. The testing allowed me the opportunity to learn a bit about practical antenna performance objectively in a shorter period than might have taken me to learn subjectively through years of experience.

A typical receive results map is depicted below. During this 29-hour period, 4,361 transmissions were received by the IC-7300 connected to a DX-CC 80-10m dipole at 28-ft above grade receiving on 20 meters.



Below is a summary of Receive cycles performed. Not all cycles are included as they were too short, or were an odd set-up, or were otherwise not representative for various reasons. This was not a “scientific” study. The cycles were performed on random dates and at random times. It is possible to influence the number of spots by starting and stopping during a “busy” period as compared to starting and stopping during a “quiet” period, for example. I do not have test cycles of each antenna with each radio; something to work on for 2021.

In the table below, # Europe refers to number of European locations, whereas # Spots refers to number of transmissions. These are Averages of the number of cycles indicated. Individual cycles have produced more than 7,000 spots: mostly during the latter months of 2020, objective evidence that band conditions are improving!

Continued on next page.....

| Receiver | Antenna | Band | # Hours | # Europe | # Spots | Spots/hr | # cycles |
|--|----------------|------|---------|----------|---------|----------|----------|
| FT-818 / PC | 14AVQ | 20m | 24 | 6 | 1509 | 63 | 3 |
| | | 40m | 22 | 31 | 3482 | 157 | 4 |
| | 40-10 dipole | 20m | 24 | 12 | 916 | 38 | 2 |
| | | 40m | 24 | 15 | 3211 | 134 | 2 |
| | Mag Mobile | 20m | 24 | 21 | 1630 | 68 | 2 |
| | | 40m | 24 | 3 | 1497 | 62 | 1 |
| | Hitch Hamstick | 20m | 17 | 11 | 478 | 34 | 5 |
| | | 40m | 24 | 0 | 1052 | 44 | 2 |
| IC-7300 / Pi 4 | Delta Loop | 20m | 24 | 30 | 3129 | 130 | 3 |
| | DX-CC | 20m | 23 | 28 | 2604 | 114 | 7 |
| | | 40m | 19 | 31 | 3070 | 168 | 9 |
| | CP-5HS | 40m | 24 | 5 | 1048 | 44 | 1 |
| SDR Play / PC | 14AVQ | 20m | 25 | 20 | 1789 | 63 | 12 |
| | | 40m | 24 | 26 | 3046 | 137 | 14 |
| | 40-10 dipole | 20m | 22 | 8 | 1056 | 45 | 13 |
| | | 40m | 22 | 8 | 1923 | 90 | 9 |
| NOTES: | | | | | | | |
| 1 - Cycles were not always 24-hour periods of time. The # Hours Averages above provide some indication of that. | | | | | | | |
| 2 - The values above are Averages of test cycles | | | | | | | |
| 3 - When cycles are less than 24-hours, the number of spots is impacted by time of day | | | | | | | |
| 4 - The cycles were conducted somewhat randomly rather than to pursue an objective | | | | | | | |
| 5 - Testing in 2021 will be performed in a more focused manner | | | | | | | |
| 6 - Columns are individually Averaged, therefore values above may differ from results obtained by division. For example 1789 spots / 25 hours = 72 spots/hr versus 63 spots/hr | | | | | | | |
| 7 - -# Europe refers to European locations, whereas # Spots refers to transmissions | | | | | | | |

The antennas involved are as follows:

- The 14AVQ is a Hy-gain 18-ft vertical antenna for 40-10m. It is mounted at grade with 6 radials spread over a 180-deg arc as it is alongside the driveway
- The 40-10 dipole is a fan dipole originally constructed while I was in high school. It has moved with me, unused, until 2019 when I retired. Originally built for 40m and 15m, I shortened the 15m legs to 10m and added 20m legs. It is located 16-ft above grade
- The Mag Mobile are Hustler antennas consisting of a magnetic base and lower mast with changeable resonator elements for 40m and 20m
- The Hitch Hamstick is the trailer hitch assembly I addressed in a previous ORACLE article. The antennas are MFJ Hamsticks for 20m and 40m

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- The Delta Loop designed by Bert / N8NN is described in a previous ORACLE article. It was supported with a Spiderbeam telescopic mast
- The DX-CC is an Alpha Delta 80m – 10m dipole strung between two trees with the center supported by an MGS telescopic mast. It is 28-ft high
- The CP-5HS is a Diamond trap vertical for 40m – 6m located 17-ft above grade. It has rigid trap radials

Following are my observations

- More transmissions are received on 40m than 20m and 40m generally receives from more locations in Europe
- The 14AVQ and DX-CC generally outperform the other antennas
- The Mag Mobile did surprisingly well, outperforming each of the other antennas with the FT-818 on 20m
- The CP-5HS has been disappointing. Though only one cycle is included in the table above, other individual cycles have resulted in limited numbers of spots. It can be difficult to tune; it is very narrow. Additional testing has already been started with it for 2021
- The SDR Play 1A is very impressive. It costs \$115 and frequently performs as well as the IC-7300 (though they are on different antennas). I will do testing with the CP-5HS and DX-CC in 2021 for better comparison to the IC-7300

Here are photos of a few of the fixed antenna installations:



14AVQ Vertical at left / CP-5HS and DX-CC center support at right

I would be interested in any thoughts or other observations about the data in the table above, the antenna installations, or suggestions for future testing. I do plan to do some time-of-day comparisons in 2021.

This contesting is nuts. Why do we do it?

Contributed by Andy Allen, NA4DA, andy@na4da.com

Andy says: *This was recently sent out by Scott Davis N3FJP (contest software developer)*

The reasons for the tremendous fun of contesting aren't always evident and they are too important to miss, especially for new folks just entering the hobby. What draws us to spend major contest weekends happily glued to our radios?

Following CQ World Wide CW 2020, one of our club's excellent, experienced testers, having just made over 1,000 Qs, wrote on our virtual clubhouse text chat group, tongue in cheek:

This contesting is nuts! Why do we do it?

Spent from the weekend, I couldn't help but laugh out loud, but the question stayed with me. This contesting ***IS*** nuts. It's hard work, takes education, effort, dedication, commitment, experimentation, knowledge, ingenuity, planning and serious time in the chair. Why ***DO*** we do it?

It turns out that, at least for me, there are lots of great reasons! Here are a few off the top of my head. I'll bet that you can add to this list...

- It is thrilling to communicate to every state, section and the 4 corners of the Earth with nothing but a piece of metal or wire in our yards, from the comfort of our homes and families.
- It is joyful to share a quick connection, however brief, with all the other stations that have become familiar on contest weekends.
- It is thrilling to watch the bands rise and fall like the tide over the course of the contest weekend, anticipating what may open next.
- It is thrilling to watch our individual and club's collective QSO rates soar when the bands come alive, on our club's real time leader board.
- It is thrilling to simultaneously, whole heartedly cheer our Club's brothers and sisters on, while doing our very best to leave them in the dust!
- It is thrilling to recognize the very real accomplishments of our scores, individually and collectively, with our club total team effort. We know full well what goes into building a successful station and putting in a successful contest effort!
- It is joyful to exchange quick banter on our virtual clubhouse text chat group during propagation lulls, as well as share needed multipliers, mentor new folks and encourage everyone to do their best.
- It is thrilling to see our club rankings in print and moving up the list when the final results are released!
- It is thrilling to watch our club's scoreboard participant numbers grow, seeing new guys jump in for the first time, knowing the fun that awaits them!
- It is thrilling to get that certificate in the mail, after you have placed well enough to earn one!
- It is fascinating to learn the strengths and weaknesses of our stations, that are so quickly revealed on contest weekends.
- It is thrilling, after the contest is over, to improve our stations, our antennas and our operating skills, to see what we can do better next time. In fact, the grand contest never ends. We are always looking for that edge and helping each other find theirs!
- It is thrilling to befriend such a fine group of folks, with whom to share this amazing adventure!

This is really, really fun stuff!

SSRC Member Biographies

Bill Gillespie, KW5BG, President

Here's the information on our new president, KW5BG! Thanks, Bill!

- Air Force 'Brat'. Born Big Spring TX.
- Lived Webb AFB TX, Randolph AFB TX, Elmendorf AFB AK, Cannon AFB NM, Brooks AFB TX.
- Graduated Highlands HS, San Antonio TX; Texas Christian University, BA Biology; Central Michigan University, MA Management.
- Commissioned May '75, active duty Aug '76 (Viet Nam draw down)
- Aircraft Maintenance Officer Grand Forks AFB ND
- Pilot Training, Williams AFB AZ
- B-52 Copilot Training Castle AFB CA
- B-52 Copilot/Pilot Wurtsmith AFB MI
- B-52 Pilot/Instructor/Evaluator Carswell AFB TX
- B-52 Pilot/Instructor/Evaluator/ Flight Safety Officer/ Logistics Support Squadron Commander Wurtsmith AFB MI
- Base Chief of Safety/AF Materiel Command Flight Safety Officer, Wright-Patterson AFB, OH
- Staff Officer Whiteman AFB MO
- Flight Safety Officer, HQ/8AF Barksdale AFB LA; Retired Aug 2004
- Worked in golf industry 2005-2010 Apopka FL
- Novice license 1978 Grand Forks ND – General/Advanced 1988 Fort Worth TX-- Extra 2020 Ocala FL;
- Married to Vicki Gillespie (another AF Brat).

